WHAT IS CLAIMED IS:

1.   An image predictive decoding method for decoding an input bitstream including variable length coded transformed coefficients, the method comprising:

decoding the variable length coded transformed coefficients into a one-dimensional array of transformed coefficients;

adaptively selecting a prediction block for a current block from either an above block or a left block immediately adjacent to the current block;

predicting a quantized DC coefficient of the current block from a quantized DC coefficient of the prediction block adaptively selected from either the above block or the left block; and

further predicting quantized AC coefficients of the current block from either set of quantized AC coefficients of:

(a) a first column of the left block when the left block is selected in the quantized DC coefficient prediction of the current block; or

(b) a first row of the above block when the above block is selected in the quantized DC coefficient prediction of the current block.

2.   An image predictive decoding apparatus for decoding an input bitstream including variable length coded transformed coefficients, said apparatus comprising:

a variable length decoder operable to decode the variable length coded transformed coefficients into a one-dimensional array of transformed coefficients;

a block selection unit operable to adaptively selecting a prediction block for a current block from either an above block or a left block immediately adjacent to the current block;

a DC prediction unit operable to predict a quantized DC coefficient of the current block from a quantized DC coefficient of the prediction block adaptively selected from either the above block or the left block; and

an AC prediction unit operable to predict quantized AC coefficients of the current block from either set of quantized AC coefficients of:

(a) a first column of the left block when the left block is selected in the quantized DC coefficient prediction of the current block; or

(b) a first row of the above block when the above block is selected in the quantized DC coefficient prediction of the current block.